

CLAIMS:

1. An assembly of a capped high-pressure discharge lamp (1) and a lamp holder (50),
the capped high-pressure discharge lamp (1) comprising:
 - an outer envelope (10) in which a discharge vessel (11) is arranged around a longitudinal axis (22),
 - the discharge vessel (11) enclosing, in a gastight manner, a discharge space (13) provided with an ionizable filling,
 - the discharge vessel (11) having a first (2) connection portion and a second (3) opposite connection portion through which a first (4) and a second (5) current-supply conductor, respectively, extend to a pair of electrodes (6, 7) arranged in the discharge space (13),
 - the outer envelope (10) having a pinched portion (20) supporting the discharge vessel (11) via the first and second current-supply conductors (4, 5),
 - the pinched portion (20) being provided with a clamping member (25) surrounding the pinched portion (20) with a clamping fit,
 - a lamp cap (30) having a base portion (32) of an insulating material and a substantially circular-cylindrical cup-shaped portion (33) for receiving the clamping member (25),
 - the cup-shaped portion (33) being provided with a protruding collar (36),
 - the base portion (32) being provided with a first (34) and a second (35) contact member projecting beyond the cup-shaped portion (33), the first and second current-supply conductors (4, 5) being electrically connected to the first and second contact members (34, 35), respectively,
 the lamp holder (50) comprising:
 - a base portion (60) and a substantially circular-cylindrical flange (55) for receiving the cup-shaped portion (33) of the capped high-pressure discharge lamp (1),
 - the base portion (60) being provided with first (74) and second (75) connection means,
 wherein

- the flange (55) of the lamp holder (50) receives the cup-shaped portion (33) of the capped high-pressure discharge lamp (1) such that the flange (55) engages the protruding collar (36) of the cup-shaped portion (33) and the first and second contact members (34, 35) make electrical contact with the first and second connection means (74, 75), respectively,
 - 5 - an inner diameter of the flange (55) having a tolerance of less than or equal to -0.2 mm,
 - an outer diameter of the cup-shaped portion (33) having a tolerance of less than or equal to +0.2 mm,
 - the respective tolerances extending over a length of at least 2.5 mm, measured
 - 10 with respect to the protruding collar (36) along the longitudinal axis (22).
2. An assembly as claimed in claim 1, characterized in that the inner diameter of the flange (55) has a tolerance of less than or equal to -0.10 mm and the outer diameter of the cup-shaped portion (33) has a tolerance of less than or equal to +0.05 mm, the respective
- 15 tolerances extending over a length of at least 5 mm, measured with respect to the protruding collar (36) along the longitudinal axis (22).
3. An assembly as claimed in claim 1 or 2, characterized in that the clamping member (25) is provided with a substantially circularly-cylindrical engagement portion (26)
- 20 for fixing the clamping member (25) in the cup-shaped portion (33).
4. An assembly as claimed in claim 1 or 2, characterized in that the cup-shaped portion (33) of the lamp cap (30) and the flange (55) of the lamp holder (50) are made from a metal.
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5. An assembly as claimed in claim 1 or 2, characterized in that a cylindrical body (60) of an insulating material is arranged with clearance in the base portion (60) of the lamp holder (50) and a resilient means (65) is provided between the cylindrical body (60) and the flange (55) of the lamp holder (50), the cylindrical body (60) engaging, under resilient
- 30 pressure, the flange (55) when the flange (55) receives the cup-shaped portion (33).
6. An assembly as claimed in claim 5, characterized in that:
- the cylindrical body (60) comprises a first cylindrical portion (61) and an adjacent second cylindrical portion (62) on a side of the first cylindrical portion (61) facing

away from the capped high-pressure discharge lamp (1),

- the first cylindrical portion (61) being provided with a first (64) and a second (65) arc-shaped slot, which slots (64, 65) are provided at one end with a circular widening (66, 67) for passing the first and second contact members (34, 35) when the flange (55) of the lamp holder (50) receives the cup-shaped portion (33) of the capped high-pressure discharge lamp (1),
- the first and second contact members (34, 35) of the base portion (32) making electrical contact with the first and second connection means (74, 75) after rotation of the first and second contact members (34, 35) in the arc-shaped slots (63),
- the first and second connection means (74, 75) being provided in the second cylindrical portion (62).

7. An assembly as claimed in claim 6, characterized in that the first and second cylindrical portion (61, 62) are made from a ceramic material.

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8. An assembly as claimed in claim 6, characterized in that the cylindrical body (60) is provided with hampering means hampering the rotation around the longitudinal axis (22) of the first and second cylindrical portions (61, 62) with respect to each other.

9. An assembly as claimed in claim 6, characterized in that the first and second cylindrical portions (61, 62) are attached to each other by retention springs (68, 69) or by rivets.

10. An assembly as claimed in claim 6, characterized in that the first and second contact members (34, 35) are provided with a shank (82, 83), the shank (82, 83) being provided with a disc (84, 85) on a side of the shank (82, 83) facing away from the cup-shaped portion (33), the disc (84, 85) having a dimension allowing passage through the circular widening (66, 67) of the slots (64, 65), the shanks (82, 83) having a smaller dimension allowing passage through the first and second arc-shaped slots (64, 65).

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11. An assembly as claimed in claim 6, characterized in that the base portion (32) of the lamp cap (30) is provided with a protruding portion cooperating with a complementary indented portion in the first cylindrical portion (61) of the cylindrical body.

12. A capped high-pressure discharge lamp (1) for use in an assembly as claimed in claim 1 or 2, the capped high-pressure discharge lamp (1) comprising:

- an outer envelope (10) in which a discharge vessel (11) is arranged around a longitudinal axis (22),
- 5 - the discharge vessel (11) enclosing, in a gastight manner, a discharge space (13) provided with an ionizable filling,
- the discharge vessel (11) having a first connection portion (2) and a second (3) opposite connection portion through which a first (4) and a second (5) current-supply conductor, respectively, extend to a pair of electrodes (6, 7) arranged in the discharge space
- 10 (13),
- the outer envelope (10) having a pinched portion (20) supporting the discharge vessel (11) via the first and second current-supply conductors (4, 5),
- the pinched portion (20) being provided with a clamping member (25) surrounding the pinched portion (20) with a clamping fit,
- 15 - a lamp cap (30) having a base portion (32) of an insulating material and a substantially circular-cylindrical cup-shaped portion (33) for receiving the clamping member (25),
- the cup-shaped portion (33) being provided with a protruding collar (36),
- the base portion (32) being provided with a first (34) and a second (35) contact
- 20 member projecting beyond the cup-shaped portion (33), the first and second current-supply conductors (4, 5) being electrically connected to the first and second contact members (34, 35), respectively,
- an outer diameter of the cup-shaped portion (33) having a tolerance of less than or equal to +0.2 mm.

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13. A lamp holder (50) for use in an assembly as claimed in claim 1 or 2, the lamp holder (50) comprising:

- a base portion (60) and a substantially circular-cylindrical flange (55) for receiving the cup-shaped portion (33) of the capped high-pressure discharge lamp (1),
- 30 - the base portion (60) being provided with first (74) and second (75) connection means,
- an inner diameter of the flange (55) having a tolerance of less than or equal to -0.2 mm.